

## ABSTRACT

The invention related to a method for checking or calibrating the angle-dependent alignment of a reference structure on a high-precision test-piece. After arrangement of the test-piece on a retainer piece, a pre-alignment of an optical unit and/or the reference structure of the test-piece is carried out, such that the test-piece beam is at least partly incident on a detector and generates at least one point there. The position of the at least one point on the detector is evaluated by means of a control/regulation unit. After a relatively fine alignment of the optical unit relative to the reference structure, by means of the control/regulation unit, depending on the position of the at least one point on the detector, such that the at least one point has a given set position on the detector, a recording of at least the retainer piece rotation angle and/or the measuring piece rotation angle is carried out, whereby a beam from the reference structure of the test-piece is generated, or modified with relation to a beam parameter, in particular, by reflection, stopping, filtering or shaping and the generated or altered beam forms the test-piece beam.